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Adapting the Utility Business Model to a Clean-Energy Future

By Tim Fitzpatrick

California has directed that by the year 2030, half of the state’s electricity must come from renewable sources. What are the business implications for utilities? How can we ensure that investment continues to flow into clean energy and the smart grid while also protecting consumers, including those who struggle to pay their bills?

Those were the questions that touched off a provocative discussion at “The California Renewables Rush” conference last week in San Francisco. Organized by the online publication The Energy Times, the conference explored how California’s ambitious targets for renewable energy are changing the utility industry, and whether the regulatory policies that govern them are keeping pace.

Pat Hogan, PG&E’s senior vice president of electric transmission and distribution, was one of four panelists invited to give their perspective on how the shift to renewables is affecting the traditional utility business model.

Issues ‘of a different order’

Pat opened by noting that California utilities are no strangers to navigating big changes in the market and regulatory landscape. But this time is different. “It won’t be business as usual,” he said. “The issues we’re facing today are of a different order than those we’ve faced in the past.” Evolving the policies “comes with a lot of complex choices. All of those choices have consequences. So everyone has a big stake in how this gets done.”

Century-old pricing model ‘isn’t going to work’

Topping that policy agenda will be the need to find a new funding mechanism to sustain the power grid.

“The more you try to plan for a clean-energy economy, the more it becomes clear that our century-old pricing model — the one which assumes the only product a customer receives from the grid is a kilowatt-hour — will no longer make sense,” Pat said. In a world where more and more customers will use the grid to buy and sell electricity, paying for the grid through rates and revenues based solely on the amount of energy people consume “isn’t going to work anymore.”

That’s an urgent problem, because making the power grid smarter so it can incorporate and manage large volumes of renewable energy will be essential to achieving California’s vision. The grid, Pat said, “will be the key. … It’s the biggest lever we have for transforming the system.”

‘No one left behind’

At the same time, any new business model will also need to ensure that clean-energy investments and infrastructure come at a cost that is affordable to all, including the 1.5 million PG&E customers who qualify for low-income discounts.

“Our job is to make sure the system works for everyone,” Pat said. “No one can be left behind. That’s a responsibility we won’t walk away from.”

Other panelists echoed Pat’s remarks, while offering their own perspectives.

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“The new utility business model has been happening in California for the last 20 years,” said Dan Skopec, vice president of regulatory affairs for San Diego Gas & Electric. The so-called “rush” to renewables represents “an evolution, not a revolution, and utilities are going to be right in the middle of it for a long time.”

‘Postcard from the future’

Contrast that to Hawaii, where the rush has been more like a stampede. Constance Lau, president and CEO of Hawaiian Electric Industries, explained that the quick payoff of installing rooftop solar panels on sunny, isolated islands led so many customers to make the switch that “frankly, we just couldn’t keep up. We didn’t have the grid technology to be able to integrate all of that all at once.”

Rates skyrocketed, and there were reliability and safety problems. After a 13-month moratorium on new rooftop solar hookups, the utility has regained its footing and is now on track to reach the state’s mandated target of 100 percent renewable power by 2045, Lau said.

But recalling the issues HEI experienced along the way, she offered her California audience “a postcard from the future.” Regardless of the business model, delivering energy reliably and safely is “the foundation of our industry,” Lau said. “If consumers don’t have safe and reliable power — game over.”

The crucial factor, Pat pointed out, will be whether California is able to “get the policies right.”
When that happens, as was the case with the state’s approach to energy efficiency, “we get great results.”

Tim Fitzpatrick is PG&E’s vice president of corporate relations and chief communications officer. Follow Tim on Twitter @PGE_Tim.